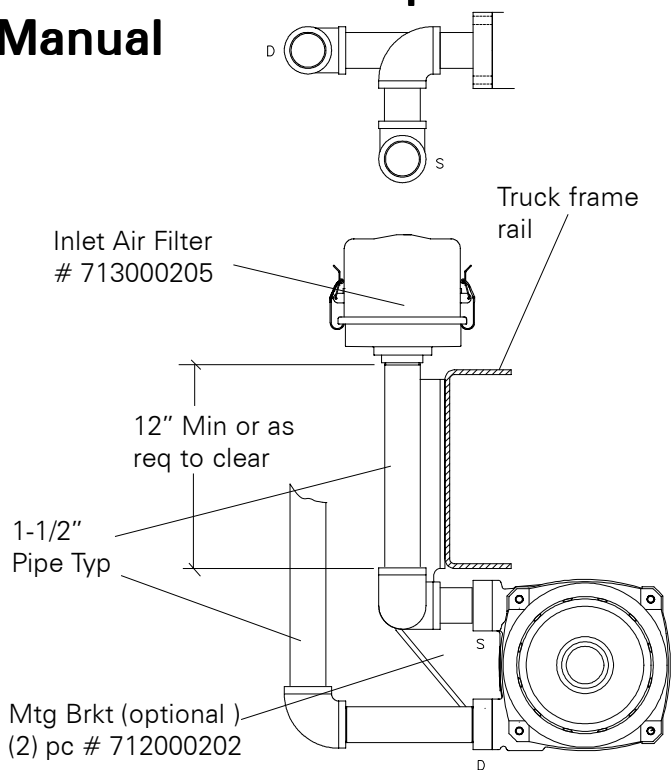


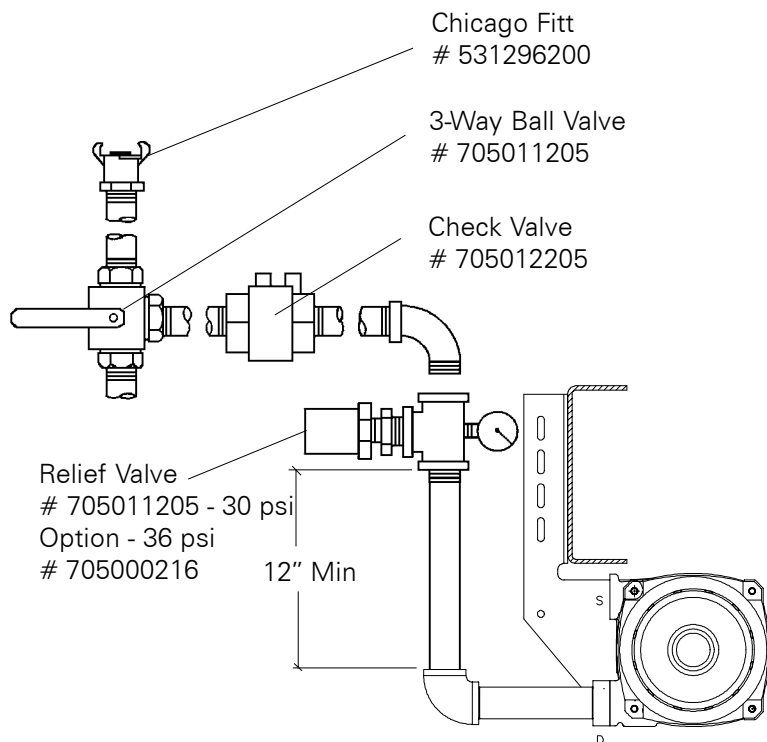


J150 COMPRESSOR

Installation and Operation Manual



Typical Inlet Pipe Work Arrangement - Side Mount Ports



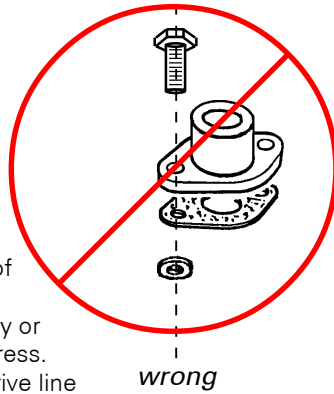
Typical Outlet Pipe Work Arrangement - Side Mount Ports

☒ **Installation Check List**

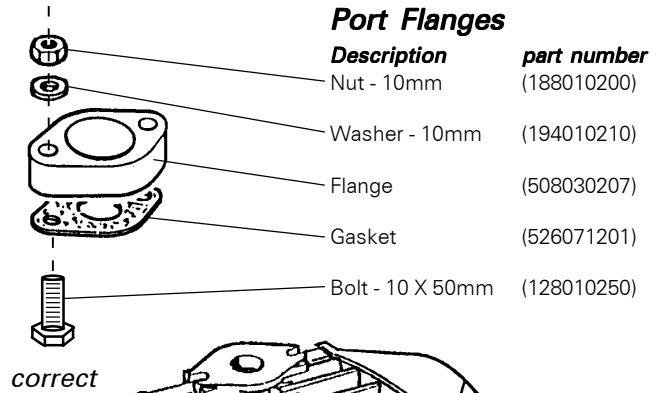
- ☐ Mount the compressor as shown, with both feet either underneath or on the side. The mounting plate should be flat and strong enough to support 120 lbs.
- ☐ For air circulation, there must be an 8" x 8" hole in the center of the mounting plate or 1" spacer blocks under the mounting feet.
- ☐ The long capscrews (35mm) should be used on the feet. Tighten to 26 ft. lbs.
- ☐ **Rotation of the machine** is shown by the arrow on the body between the suction and delivery port.
- Arrow points to suction port. -
- ☐ Mount the machine so that the rotation matches the PTO rotation. To change rotation, remove cowls, switch drive flange/yoke to other end of compressor, and replace the cowls.
- ☐ Do not force end yokes or drive flange onto the compressor or PTO shaft.
- ☐ Use a tube type balanced PTO drive shaft, parallel with the PTO output shaft axis within 2° to ensure vibration-free running. The maximum driveline angle is 10°.
- ☐ A 30 or 36psi relief valve should be mounted 12"-24" from the compressor discharge with valve outlet away from machine and filter inlet.
- ☐ The air filter should be mounted in an **upright** position at least 12" from compressor inlet, with free access to element and away from exhaust fumes and road spray. For tractor mount, we recommend above frame rails behind the cab.
- ☐ Suction (1½" I.D.) and delivery pipework (1½" I.D., 1" I.D. minimum) should be free of weld beads or foreign material and supported by brackets. Do not contaminate the inside of the piping with Teflon tape or pipe dope thread sealer.
- ☐ If pipework runs to the opposite frame rail, it must have a flexible section to prevent distortion of the compressor.
- ☐ Install discharge filter (p/n 713031200, M202 or equivalent) with minimal restriction, to prevent compressor overheating.
- ☐ A 3-way ball valve (1") should be installed into delivery pipework to bleed air and control system pressure. The ball valve should be installed prior to Chicago fitting to manually isolate the compressor from the trailer.
- ☐ A liquid-filled pressure gauge is recommended in the delivery pipework for ease of operation and system troubleshooting.
- ☐ The operating speeds are:
 - 1000 -1800rpm for J150
 - For optimum performance 1200-1400rpm is recommended.
- ☐ Calculate engine speed using the PTO ratio.
- ☐ A constant speed governor or throttle control system is recommended.
- ☐ Check compressor speed with tachometer to ensure proper operation.
- ☐ Post engine speed in cab on label provided.

Installation - Notes

- Allow 1" minimum clearance around machine for cooling purposes.
- The relief valve must be installed before starting the compressor. Reduce the set pressure by 1psi for each 2000 ft. of operating altitude above sea level.
- Mount the relief valve horizontally or pointed down to prevent water ingress.
- Do not exceed recommended drive line angle
- Check valve must be mounted after the relief valve.
- Air line size from discharge pipework to manifold must be at least 1" I.D. for adequate unloading rates.
- Ensure bolt head is placed down into the port recess when installing port flanges.
- The compressor can be mounted on any of its 4 mounting faces as shown see Fig 2.



wrong



correct

Lockwasher
(194010210)

Mounting Foot
(507003202)

Capscrew
(128110235)

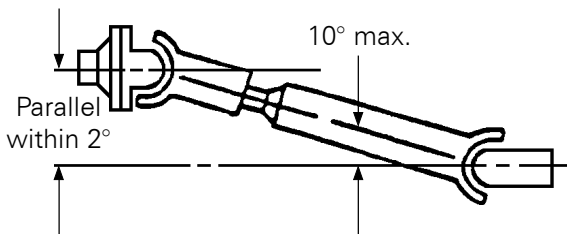
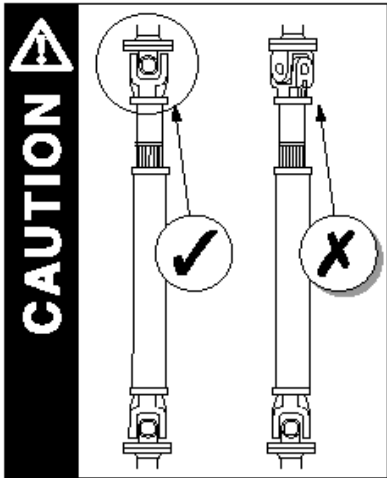
Spacer
(516020202)

Shaft
25mm dia.
8mm key

The mounting bolt pattern for the mounting foot is a square pattern typical on each end. This will allow the mounting foot to be located so that the inlet and the outlet can be on the top, bottom, right side or left side.

Drive Line Specifications

- ☐ Do not force end yokes or drive flange onto the compressor or PTO shaft.
- ☐ Use a tube type balanced PTO drive shaft, parallel with the PTO output shaft axis within 2° to ensure vibration-free running. The maximum driveline angle is 10°.
- ☐ Be sure U-joint yokes are in phase (see Caution note)



**Port Flange and Mtg
Foot installation
Fig 2**

Operation

- Inspect compressor mounting, driveline, PTO, and air filter for integrity.
- Check that the bleed valve is set to vent to atmosphere.
- Follow trailer instructions regarding product hose connection and valve operation.
- Slowly engage PTO with engine at idle, and bring up to operating speed shown on label.

Incorrect speed will cause compressor failure.

- Lock engine at recommended speed. The engine speed must remain constant throughout the discharge cycle.
- Turn bleed valve to direct air into the tank.
- Unload trailer as per trailer manufacturer's recommendation. Do not exceed maximum tank pressure.
- If relief valve is operating, adjust bleed valve to reduce tank pressure.

Note: Do not decrease engine speed to reduce pressure. Too low (or high) speed will cause compressor failure.

- When unloading is completed, open the bleed valve and reduce pressure as per trailer manufacturer's instructions.
- Check that all valves are in their correct shutdown positions.
- Disengage PTO.

Hydraulic Drive Operation

- Engage PTO and set correct engine speed.
- Operate the selector valve to start the compressor.
- Continue as PTO drive, use the selector valve to stop the compressor when unloading is complete.

Important Notes

- These instructions are not intended to modify or circumvent any company policies or procedures. Any differences, whether stated or implied should be investigated before proceeding.
- Never pour any liquid or rust inhibitor in the machine, as it will damage the blades.

Routine Maintenance

Weekly

- Check driveline stability.
- Mounting integrity of compressor and pipework.
- Clear fan area and body of any obstructions.
- Run machine for 2-3 minutes.

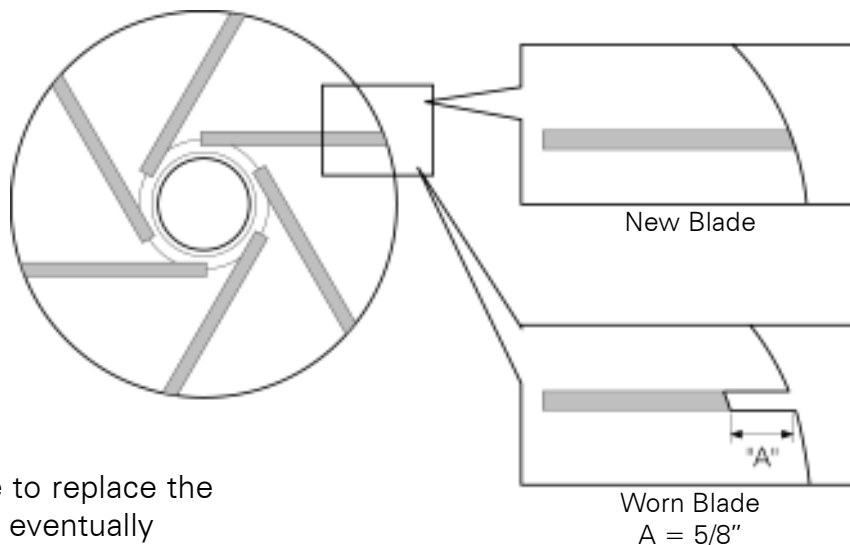
Monthly

- Air filter element is clean.
- PTO mounting bolts and transmission oil level.
- Drive shaft bearings.
- Compressor and pipework installation bolts.
- Check valve is functioning.
- Relief valve setting, 30psi for J150 (optional 36 psi)
- Check compressor speed is maintained by governor
- No air leaks.
- Is engine speed label visible in cab?

Yearly

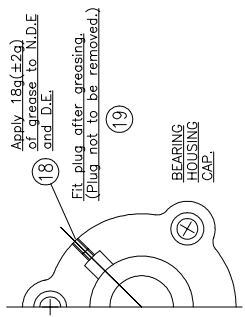
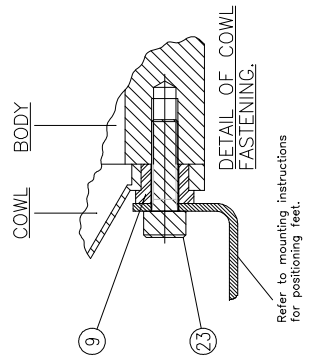
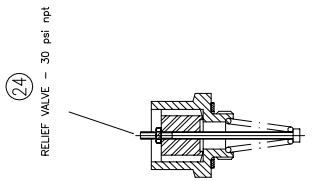
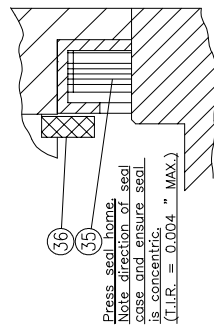
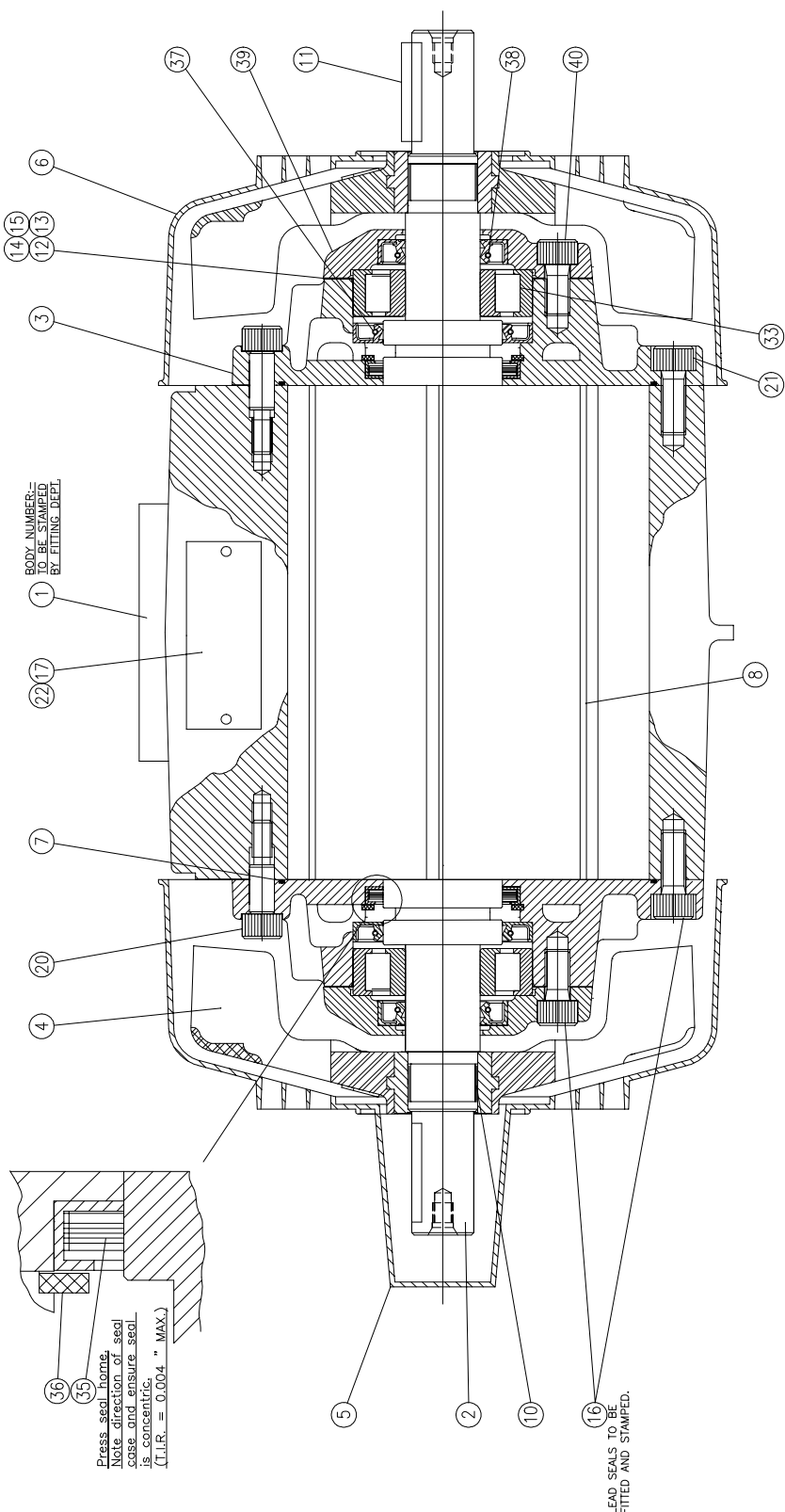
- Check blade wear by measuring distance from the corner of the rotor slot to the blade. Replace blade before 5/8" wear is reached.

Blade wear can be checked through the suction port with calipers, after machine is turned off and cool.



Note - Failure to replace the blades will eventually result in machine failure. Late blade change can permanently damage the machine so that future blade life is reduced.

Blade Replacement Fig 4



Bill of Material

Detail	Qty	Part No.	Description
1	1	500000200	Compressor Body
2	1	3664516000-2	Rotor
3	2	3801816005-2	Side Plate
4	2	3301016450-2	Fan
5	1	505020200	Cowl Non Drive End
6	1	505010200	Cowl Drive end
7	2	6758300600-2	O-ring - 147
8	6	3091616000-2	Blade - V1754
9	8	3131216848-2	Bushing - Mounting
10	2	M750280015-7	Star Tolerance Ring
11	1	M200807040-4	Key
12	2	7701100635-2	Shim - 0.050
13	2	7711100635-2	Shim - 0.075
14	2	7721100635-2	Shim - 0.125
15	2	7731100635-2	Shim - 0.250
16	4	7200300470-2	Sealong Disc (Lead Plug)
17	1	6726200451-2	Drum Name plate
18	A/R	520010203	Grease (Areoshell # 5)
19	2	6950900841-2	AVSEAL Plug
20	2	174210040	Shoulder Screw
21	6	128110425	Cap Screw M10 x 25 mm
22	8	7360100000-2	Metal Tack
23	8	128110435	Cap Screw M10 x 35 mm
24	1	V200-F30	Relief Valve - 30 psi
30	1	6710300451-2	Rotation Arrow Label
31	1	6726500451-2	Air Inlet Name Plate
32	1	6726600451-2	Discharge Name Plate
33	2	6036900850-2	Bearing NJ306
34	1	302127203	35 mm Plug
35	2	3730700869-2	Air Seal 48 mm x 62 mm x 7 mm
36	2	M140620000-8	Snap Ring 62 mm
37	2	7163500000-2	Oil Seal double lip
38	2	7163600000-2	Oil Seal double lip
39	2	3150116	Bearing Housing Cap
40	6	128110020	Cap Screw M10 x 20 mm

SAFETY PRECAUTIONS



- Rotating shafts can be dangerous. You can snag clothes, skin, hair, hands, etc. This can cause serious injury or death.
- Do not work under the vehicle when the engine is running.
- Do not work on a shaft (with or without a guard) when the engine is running.
- Do not engage or disengage driven equipment by hand from under the vehicle when the engine is running.
- In order to avoid becoming entangled, install the power takeoff and/or shaft behind the frame rail, tanks, battery box, etc.
- If power takeoff and/or shaft are still exposed after installation, install a guard.
- Install a support strap when servicing a driveshaft to prevent personal injury.
- Compressor housing & associated piping or accessories may become hot enough to cause burns on contact.
- Wear adequate ear protection and avoid extended exposure in close proximity to noisy machinery.
- A serious or fatal injury can occur . . .
 - ☆ if you lack proper training
 - ☆ if you fail to follow proper procedures
 - ☆ if you do not use proper tools and safety equipment
 - ☆ if you assemble driveline components improperly
 - ☆ if you use incompatible driveline components
 - ☆ if you use worn-out or damaged driveline components
 - ☆ if you use driveline components in a non-approved application.
- These instructions contain safety instructions. Read, understand and follow these instructions.
 - ☆ Get proper training
 - ☆ Learn and follow safe operating procedures
 - ☆ Use proper tools and safety equipment
 - ☆ Use proper components in good condition

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NO TORT LIABILITY: SELLER DISCLAIMS ANY LIABILITY FOR CLAIMS BASED ON SELLER'S NEGLIGENCE OR STRICT LIABILITY IN TORT.

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TRAINING AND SUPERVISION: The buyer hereby assumes the affirmative duty to properly educate, instruct and supervise its employees and all others, except employees of the Seller, in the safe, proper use and operation of the goods. The Buyer agrees to indemnify the Seller for any damages paid by the latter as a result of the Buyer's failure to perform this affirmative duty.

Seller is not responsible for claims for damage due to improper installation or maintenance, corrosive fluids, or use of a product for a purpose other than it was specifically designed for. The goods are not designed or intended for use with every substance. If the material which the Buyer contemplates transferring with the goods has corrosive or polymerizing or other properties which may result in unsatisfactory or dangerous operations, the Seller has no liability or responsibility for performance of the goods.

RETURN OF GOODS: No goods supplied may be returned to the Seller for credit without the Seller's prior written authorization before transportation thereof commences and in such cases transportation must be prepaid and the Buyer's name, address, original order number and the Seller's invoice number must be clearly marked on the shipping tag.

If any goods are returned to the Seller for repair or under warranty and no instructions are received within two months after Seller receives the goods for repair or sends notice to Buyer of the disallowance of a warranty claim, the Seller reserves the right to scrap the goods returned, and no subsequent claim for any costs or losses will be accepted.

APPLICABLE LAW AND VENUE: The rights and obligations of the parties hereunder shall be governed in all respects, including all questions of construction and performance of this order, by the laws of Kentucky. All disputes concerning this order shall be resolved in an appropriate state or federal court located in Louisville, Kentucky.

MODIFICATION OR RESCISSION: This warranty can only be modified or rescinded by a written agreement signed by an officer of both the Buyer and the Seller.

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